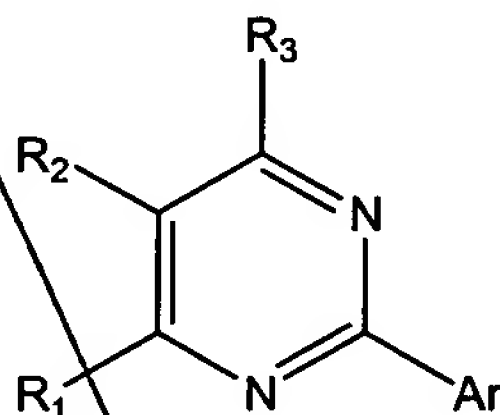


*B1*  
R<sub>1</sub> and R<sub>3</sub> are independently chosen from hydrogen, bromo, fluoro, iodo, cyano, nitro, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted alkoxy, optionally substituted (cycloalkyl)alkyl, optionally substituted alkylthio, optionally substituted alkylsulfinyl, optionally substituted alkylsulfonyl, or optionally substituted mono- or dialkylcarboxamide, with the proviso that R<sub>1</sub> and R<sub>3</sub> are not both hydrogen; and

*Sub E1*  
R<sub>2</sub> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted alkoxy, optionally substituted aminoalkyl, optionally substituted mono or dialkylamino, optionally substituted alkylthio, optionally substituted alkylsulfinyl, optionally substituted alkylsulfonyl, optionally substituted mono or dialkylcarboxamide, optionally substituted carbocyclic aryl or optionally substituted heteroaryl having from 1 to 3 rings, and 3 to 8 ring members in each ring and 1 to about 3 heteroatoms.

2. (amended) A compound of the formula:



or a pharmaceutically acceptable salt thereof, wherein:

Ar is phenyl which is mono-, di-, or tri-substituted;

R<sub>1</sub> and R<sub>3</sub> are independently chosen from hydrogen, bromo, fluoro, iodo, cyano, nitro, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted alkoxy, optionally substituted (cycloalkyl)alkyl, optionally substituted alkylthio, optionally substituted alkylsulfinyl, or optionally substituted alkylsulfonyl, and optionally substituted mono or dialkylcarboxamide, with the proviso that R<sub>1</sub> and R<sub>3</sub> are not both hydrogen; and

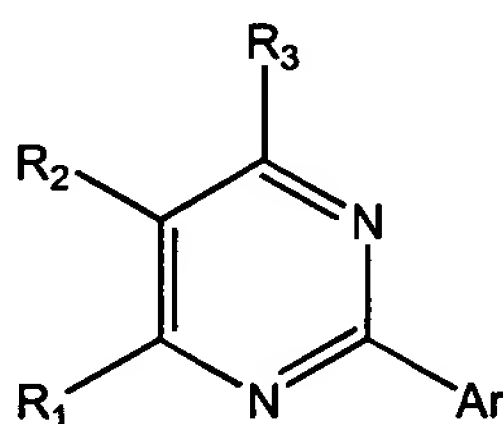
*B1*  
*Sub*  
*E1*

~~R<sub>2</sub> is optionally substituted alkyl, optionally substituted alkoxy, optionally substituted aminoalkyl, optionally substituted mono or dialkylamino, optionally substituted alkylthio, optionally substituted alkylsulfinyl, optionally substituted alkylsulfonyl, optionally substituted mono or dialkylcarboxamide, or~~

~~R<sub>2</sub> is selected from the group consisting of phenyl, naphthyl, pyridyl, pyrimidinyl, pyridizinyl, and thiophenyl, each of which is optionally mono-, di-, or tri-substituted.~~

*para*  
*C2*

3. (amended) A compound of the formula



or a pharmaceutically acceptable salt thereof, wherein:

R<sub>1</sub> and R<sub>3</sub> are independently selected from hydrogen, bromo, fluoro, iodo, cyano, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, (C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>1-4</sub>alkyl, (C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>2-4</sub>alkenyl, (C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>2-4</sub>alkynyl, -O(C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>1-4</sub>alkyl, -O(C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>2-4</sub>alkenyl, -O(C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>2-4</sub>alkynyl, halo(C<sub>1-6</sub>)alkyl, haloC<sub>2-6</sub>alkenyl, haloC<sub>2-6</sub>alkynyl, -O(halo(C<sub>1-6</sub>)alkyl), -O(halo(C<sub>2-6</sub>)alkenyl), -O(halo(C<sub>2-6</sub>)alkynyl), -O(C<sub>1-6</sub>alkyl), -O(C<sub>2-6</sub>alkenyl), -O(C<sub>2-6</sub>alkynyl), S(O)<sub>n</sub>(C<sub>1-6</sub>alkyl), S(O)<sub>n</sub>(C<sub>2-6</sub>alkenyl), and S(O)<sub>n</sub>(C<sub>2-6</sub>alkynyl),

where each alkyl, or alkenyl is independently straight, branched, or cyclic, and each alkynyl is straight or branched, and is optionally substituted with one or more substituents independently chosen from halogen, hydroxy, oxo, cyano, C<sub>1-4</sub>alkoxy, amino, and mono- or di(C<sub>1-4</sub>)alkylamino,

and

where each C<sub>3-7</sub>cycloalkyl<sub>1</sub> is optionally substituted by one or more substituents independently chosen from halogen, hydroxy, oxo, cyano, C<sub>1-4</sub>alkoxy, amino, and mono- or di(C<sub>1-4</sub>)alkylamino,

with the proviso that not both  $R_1$  and  $R_3$  are hydrogen;

$R_2$  is selected from the group consisting of  $-XR_A$  and  $Y$ ; and

$Ar$  is selected from the group consisting of phenyl, naphthyl, pyridyl, pyrimidinyl, pyridizinyl, and thiophenyl, each of which is mono-, di-, or tri-substituted with  $R_C$ ;

$R_A$  and  $R_B$ , which may be the same or different, are independently selected at each occurrence from:

hydrogen, straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms, each of which may be further substituted with one or more substituent(s) independently selected from oxo, hydroxy, halogen, cyano, amino,  $C_{1-6}$ alkoxy,  $-NH(C_{1-6}alkyl)$ ,  $-N(C_{1-6}alkyl)(C_{1-6}alkyl)$ ,  $-NHC(=O)(C_{1-6}alkyl)$ ,  $-N(C_{1-6}alkyl)C(=O)(C_{1-6}alkyl)$ ,  $-NHS(O)_n(C_{1-6}alkyl)$ ,  $-S(O)_n(C_{1-6}alkyl)$ ,  $-S(O)_nNH(C_{1-6}alkyl)$ ,  $-S(O)_nN(C_{1-6}alkyl)(C_{1-6}alkyl)$ , and  $Z$ ;

$R_C$  is independently selected at each occurrence from halogen, cyano, halo( $C_{1-6}$ )alkyl, halo( $C_{1-6}$ )alkoxy, hydroxy, amino,  $C_{1-6}$ alkyl substituted with 0-2  $R_D$ ,  $C_{2-6}$  alkenyl substituted with 0-2  $R_D$ ,  $C_{2-6}$ alkynyl substituted with 0-2  $R_D$ ,  $C_{3-7}$ cycloalkyl substituted with 0-2  $R_D$ , ( $C_{3-7}$ cycloalkyl) $C_{1-4}$ alkyl substituted with 0-2  $R_D$ ,  $C_{1-6}$ alkoxy substituted with 0-2  $R_D$ ,  $-NH(C_{1-6}alkyl)$  substituted with 0-2  $R_D$ ,  $-N(C_{1-6}alkyl)(C_{1-6}alkyl)$  each  $C_{1-6}alkyl$  independently substituted with 0-2  $R_D$ ,  $-XR_A$ , and  $Y$ ;

$R_D$  is independently selected at each occurrence from the group consisting of halogen, hydroxy, cyano, amino,  $C_{1-4}$ alkyl,  $-O(C_{1-4}alkyl)$ ,  $-NH(C_{1-4}alkyl)$ ,  $-N(C_{1-4}alkyl)(C_{1-4}alkyl)$ ,  $-S(O)_n(alkyl)$ , halo( $C_{1-4}$ )alkyl, halo( $C_{1-4}$ )alkoxy,  $CO(C_{1-4}alkyl)$ ,  $CONH(C_{1-4}alkyl)$ ,  $CON(C_{1-4}alkyl)(C_{1-4}alkyl)$ ,  $-XR_A$ , and  $Y$ ;

$X$  is independently selected at each occurrence from the group consisting of  $-CH_2-$ ,  $-CHR_B-$ ,  $-O-$ ,  $-C(=O)-$ ,  $-C(=O)O-$ ,  $-S(O)_n-$ ,  $-NH-$ ,  $-NR_B-$ ,  $-C(=O)NH-$ ,  $-C(=O)NR_B-$ ,  $-S(O)_nNH-$ ,  $-S(O)_nNR_B-$ ,  $-OC(=S)S-$ ,  $-NHC(=O)-$ ,  $-NR_BC(=O)-$ ,  $-NHS(O)_n-$ ,  $-OSiH_n(C_{1-4}alkyl)_{2-n}-$ , and  $-NR_BS(O)_n-$ ;

B1  
C2  
cont

B1  
C2  
cont  
Y and Z are independently selected at each occurrence from: 3- to 7-membered carbocyclic or heterocyclic groups which are saturated, unsaturated, or aromatic, which may be further substituted with one or more substituents independently selected from halogen, oxo, hydroxy, amino, cyano, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), and -S(O)<sub>n</sub>(alkyl),

said 3- to 7-membered heterocyclic groups containing one or more heteroatom(s) independently selected from N, O, and S, with the point of attachment being either carbon or nitrogen; and

n is independently selected at each occurrence from 0, 1, and 2.

B2  
Sub  
El  
7. (amended) A compound or salt according to Claim 3, wherein:

Ar is phenyl mono-, di-, or tri-substituted with R<sub>C</sub>; and

R<sub>A</sub> and R<sub>B</sub>, which may be the same or different, are independently selected at each occurrence from:

straight, branched, or cyclic alkyl groups having from 1 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms.

8. (amended) A compound or salt according to Claim 3, wherein:

Ar is phenyl mono-, di-, or tri-substituted with R<sub>C</sub>;

R<sub>A</sub> and R<sub>B</sub>, which may be the same or different, are independently selected at each occurrence from:

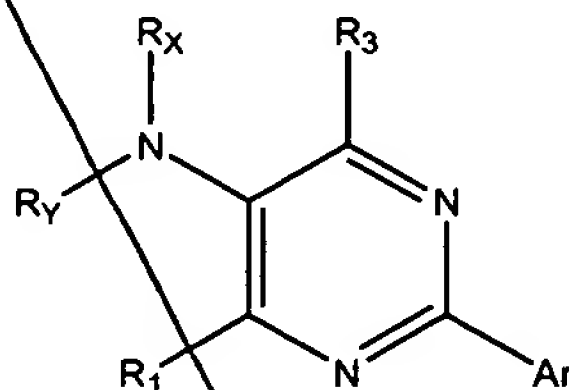
straight, branched, or cyclic alkyl groups having from 1 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms; and

R<sub>1</sub> and R<sub>3</sub> are independently selected from the group consisting of halogen,

Sub  
E1  
B2

C<sub>1-3</sub>alkyl, C<sub>1-3</sub>alkoxy, (C<sub>3-7</sub>cycloalkyl)C<sub>1-3</sub>alkyl, (C<sub>3-7</sub>cycloalkyl) C<sub>1-3</sub>alkoxy, each of which is unsubstituted or substituted by 1-3 groups independently chosen from hydroxy, amino, cyano, and halogen.

9. (amended) A compound of Formula A



Formula A

or a pharmaceutically acceptable salt thereof, wherein:

R<sub>X</sub> and R<sub>Y</sub> are the same or different and are independently selected from:

- hydrogen,
- (C=O)alkyl<sub>A</sub>, wherein alkyl<sub>A</sub> is a straight or branched alkyl group having from 1 to 8 carbon atoms;
- straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, cycloalkyl(alkyl)groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms, each of which may be further substituted with one or more substituent(s) independently selected from:
  - hydroxy, halogen, amino, cyano, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), and -NH(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), and
  - 3- to 7-membered carbocyclic and heterocyclic groups, which are saturated, unsaturated, or aromatic, which may be substituted with one or more substituents independently selected from halogen, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, oxo, hydroxy, amino, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), and -S(O)<sub>n</sub>(alkyl), wherein said 3- to 7-membered heterocyclic groups

contain one or more heteroatom(s) independently selected from N, O, and S, with the point of attachment being either carbon or nitrogen,

$B^2$   
 $C^3$   
cont  
R<sub>1</sub> and R<sub>3</sub> are independently selected from hydrogen, halogen, cyano, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, (C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>1-4</sub>alkyl, (C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>2-4</sub>alkenyl, (C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>2-4</sub>alkynyl, -O(C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>1-4</sub>alkyl, -O(C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>2-4</sub>alkenyl, -O(C<sub>3-7</sub>cycloalkyl<sub>1</sub>)C<sub>2-4</sub>alkynyl, halo(C<sub>1-6</sub>)alkyl, haloC<sub>2-6</sub>alkenyl, haloC<sub>2-6</sub>alkynyl, -O(halo(C<sub>1-6</sub>)alkyl), -O(halo(C<sub>2-6</sub>)alkenyl), -O(halo(C<sub>2-6</sub>)alkynyl), -O(C<sub>1-6</sub>alkyl), -O(C<sub>2-6</sub>alkenyl), -O(C<sub>2-6</sub>alkynyl), S(O)<sub>n</sub>(C<sub>1-6</sub>alkyl), S(O)<sub>n</sub>(C<sub>2-6</sub>alkenyl), and S(O)<sub>n</sub>(C<sub>2-6</sub>alkynyl),

where each alkyl, or alkenyl is independently straight, branched, or cyclic, and each alkynyl is straight or branched, and is optionally substituted by one or more substituents independently chosen from halogen, hydroxy, oxo, cyano, C<sub>1-4</sub>alkoxy, amino, and mono- or di(C<sub>1-4</sub>)alkylamino,

and

where said C<sub>3-7</sub>cycloalkyl<sub>1</sub> is optionally substituted by one or more substituents independently chosen from halogen, hydroxy, oxo, cyano, C<sub>1-4</sub>alkoxy, amino, and mono- or di(C<sub>1-4</sub>)alkylamino

with the proviso that not both R<sub>1</sub> and R<sub>3</sub> are hydrogen;

Ar is selected from the group consisting of phenyl, naphthyl, pyridyl, pyrimidinyl, and thiophenyl, each of which is mono-, di-, or tri-substituted with R<sub>C</sub>;

R<sub>A</sub> and R<sub>B</sub>, which may be the same or different, are independently selected at each occurrence from the group consisting of:

hydrogen, straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, and straight or branched alkynyl groups consisting of 2 to 8 carbon atoms, each of which may be further substituted with one or more substituent(s) independently selected from oxo, hydroxy, halogen, nitro, cyano, C<sub>1-6</sub>alkoxy, -NH(C<sub>1-6</sub>alkyl), -N(C<sub>1-6</sub>alkyl)(C<sub>1-6</sub>alkyl), -NHC(=O)(C<sub>1-6</sub>alkyl), -N(C<sub>1-</sub>

~~$\text{C}_{1-6}\text{alkyl})\text{C}(=\text{O})(\text{C}_{1-6}\text{alkyl}), -\text{NHS}(\text{O})_n(\text{C}_{1-6}\text{alkyl}), -\text{S}(\text{O})_n(\text{C}_{1-6}\text{alkyl}), -\text{S}(\text{O})_n\text{NH}(\text{C}_{1-6}\text{alkyl}), -\text{S}(\text{O})_n\text{N}(\text{C}_{1-6}\text{alkyl})(\text{C}_{1-6}\text{alkyl}), \text{ and } \text{Z};$~~

~~$\text{R}_\text{C}$  is independently selected at each occurrence from halogen, cyano, halo( $\text{C}_{1-6}$ )alkyl, halo( $\text{C}_{1-6}$ )alkoxy, hydroxy, amino, and  $\text{C}_{1-6}$ alkyl substituted with 0-2  $\text{R}_\text{D}$ ,  $\text{C}_{2-6}$  alkenyl substituted with 0-2  $\text{R}_\text{D}$ ,  $\text{C}_{2-6}$ alkynyl substituted with 0-2  $\text{R}_\text{D}$ ,  $\text{C}_{3-7}$ cycloalkyl substituted with 0-2  $\text{R}_\text{D}$ , ( $\text{C}_{3-7}$ cycloalkyl) $\text{C}_{1-4}$ alkyl substituted with 0-2  $\text{R}_\text{D}$ ,  $\text{C}_{1-6}$ alkoxy substituted with 0-2  $\text{R}_\text{D}$ ,  $-\text{NH}(\text{C}_{1-6}\text{alkyl})$  substituted with 0-2  $\text{R}_\text{D}$ ,  $-\text{N}(\text{C}_{1-6}\text{alkyl})(\text{C}_{1-6}\text{alkyl})$  each  $\text{C}_{1-4}$ alkyl independently substituted with 0-2  $\text{R}_\text{D}$ ,  $-\text{XR}_\text{A}$ , and  $\text{Y}$ , with the proviso that at least one of the positions ortho or para to the point of attachment of  $\text{Ar}$  to the pyrimidine ring shown in Formula A is substituted;~~

~~$\text{R}_\text{D}$  is independently selected at each occurrence the group consisting of halogen, hydroxy, cyano,  $\text{C}_{1-4}$ alkyl,  $-\text{O}(\text{C}_{1-4}\text{alkyl})$ ,  $-\text{NH}(\text{C}_{1-4}\text{alkyl})$ ,  $-\text{N}(\text{C}_{1-4}\text{alkyl})(\text{C}_{1-4}\text{alkyl})$ ,  $-\text{S}(\text{O})_n(\text{alkyl})$  halo( $\text{C}_{1-4}$ )alkyl, halo( $\text{C}_{1-4}$ )alkoxy,  $\text{CO}(\text{C}_{1-4}\text{alkyl})$ ,  $\text{CONH}(\text{C}_{1-4}\text{alkyl})$ ,  $\text{CON}(\text{C}_{1-4}\text{alkyl})(\text{C}_{1-4}\text{alkyl})$ ,  $-\text{XR}_\text{A}$ , and  $\text{Y}$ ;~~

~~$\text{X}$  is independently selected at each occurrence from the group consisting of  $-\text{CH}_2-$ ,  $-\text{CHR}_\text{B}-$ ,  $-\text{O}-$ ,  $-\text{C}(=\text{O})-$ ,  $-\text{C}(=\text{O})\text{O}-$ ,  $-\text{S}(\text{O})_n-$ ,  $-\text{NH}-$ ,  $-\text{NR}_\text{B}-$ ,  $-\text{C}(=\text{O})\text{NH}-$ ,  $-\text{C}(=\text{O})\text{NR}_\text{B}-$ ,  $-\text{S}(\text{O})_n\text{NH}-$ ,  $-\text{S}(\text{O})_n\text{NR}_\text{B}-$ ,  $-\text{OC}(=\text{S})\text{S}-$ ,  $-\text{NHC}(=\text{O})-$ ,  $-\text{NR}_\text{B}\text{C}(=\text{O})-$ ,  $-\text{NHS}(\text{O})_n-$ ,  $-\text{OSiH}_n(\text{C}_{1-4}\text{-alkyl}_{2-n})-$ , and  $-\text{NR}_\text{B}\text{S}(\text{O})_n-$ ;~~

~~$\text{Y}$  and  $\text{Z}$  are independently selected at each occurrence from the group consisting of: 3- to 7-membered carbocyclic and heterocyclic groups, which are saturated, unsaturated, or aromatic, which may be further substituted with one or more substituents independently selected from halogen, oxo, hydroxy, amino,  $\text{C}_{1-4}$ alkyl,  $-\text{O}(\text{C}_{1-4}\text{alkyl})$ ,  $-\text{NH}(\text{C}_{1-4}\text{alkyl})$ ,  $-\text{N}(\text{C}_{1-4}\text{alkyl})(\text{C}_{1-4}\text{alkyl})$ , and  $-\text{S}(\text{O})_n(\text{alkyl})$ ; and~~

~~$n$  is 0, 1, or 2.~~

10. (amended) A compound or salt according to Claim 9, wherein:

$\text{R}_\text{X}$  and  $\text{R}_\text{Y}$  are the same or different and are independently selected from:

a)  $-(\text{C}=\text{O})\text{alkyl}_\text{A}$ , wherein  $\text{alkyl}_\text{A}$  is a straight or branched alkyl group having from 1 to 8 carbon atoms;



B<sup>2</sup>  
C<sup>3</sup>  
Cont

b) straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms, each of which may be further substituted with one or more substituent(s) independently selected from:

- i) hydroxy, halogen, amino, cyano, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), and -NH(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), and
- ii) 3- to 7-membered carbocyclic and heterocyclic groups, which are saturated, unsaturated, or aromatic, which may be substituted with one or more substituents independently selected from halogen, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, oxo, hydroxy, amino, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), and -S(O)<sub>n</sub>(alkyl), wherein said 3- to 7-membered heterocyclic groups contain one or more heteroatom(s) independently selected from N, O, and S, with the point of attachment being either carbon or nitrogen,

R<sub>1</sub> and R<sub>3</sub> are independently selected from hydrogen, halogen, cyano, C<sub>1-6</sub> alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, (C<sub>3-7</sub>cycloalkyl)<sub>1</sub>C<sub>1-4</sub>alkyl, (C<sub>3-7</sub>cycloalkyl)<sub>1</sub>C<sub>2-4</sub>alkenyl, (C<sub>3-7</sub>cycloalkyl)<sub>1</sub>C<sub>2-4</sub>alkynyl, -O(C<sub>3-7</sub>cycloalkyl)<sub>1</sub>C<sub>1-4</sub>alkyl, -O(C<sub>3-7</sub>cycloalkyl)<sub>1</sub>C<sub>2-4</sub>alkenyl, -O(C<sub>3-7</sub>cycloalkyl)<sub>1</sub>C<sub>2-4</sub>alkynyl, halo(C<sub>1-6</sub>)alkyl, haloC<sub>2-6</sub>alkenyl, haloC<sub>2-6</sub>alkynyl, -O(halo(C<sub>1-6</sub>)alkyl), -O(halo(C<sub>2-6</sub>)alkenyl), -O(halo(C<sub>2-6</sub>)alkynyl), -O(C<sub>1-6</sub>alkyl), -O(C<sub>2-6</sub>alkenyl), and -O(C<sub>2-6</sub>alkynyl),

where each alkyl, or alkenyl is independently straight, branched, or cyclic, and each alkynyl is straight or branched, and is optionally substituted by one or more substituents independently chosen from halogen, hydroxy, oxo, cyano, C<sub>1-4</sub>alkoxy, amino, and mono- or di(C<sub>1-4</sub>)alkylamino,

and



where said C<sub>3-7</sub>cycloalkyl<sub>1</sub> is optionally substituted by one or more substituents independently chosen from halogen, hydroxy, oxo, cyano, C<sub>1-4</sub>alkoxy, amino, and mono- or di(C<sub>1-4</sub>)alkylamino

B<sup>2</sup> Ar is phenyl, which is mono-, di-, or tri-substituted with R<sub>C</sub>;

R<sub>A</sub> and R<sub>B</sub>, which may be the same or different, are independently selected at each occurrence from the group consisting of:

C<sup>3</sup>  
cont  
hydrogen, straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, and straight or branched alkynyl groups consisting of 2 to 8 carbon atoms, each of which may be further substituted with one or more substituent(s) independently selected from oxo, hydroxy, halogen, nitro, cyano, C<sub>1-6</sub>alkoxy, -NH(C<sub>1-6</sub>alkyl), -N(C<sub>1-6</sub>alkyl)(C<sub>1-6</sub>alkyl), -NHC(=O)(C<sub>1-6</sub>alkyl), -N(C<sub>1-6</sub>alkyl)C(=O)(C<sub>1-6</sub>alkyl), and Z;

R<sub>C</sub> is independently selected at each occurrence from halogen, cyano, halo(C<sub>1-6</sub>)alkyl, halo(C<sub>1-6</sub>)alkoxy, hydroxy, amino, and C<sub>1-6</sub>alkyl substituted with 0-2 R<sub>D</sub>, C<sub>2-6</sub> alkenyl substituted with 0-2 R<sub>D</sub>, C<sub>2-6</sub>alkynyl substituted with 0-2 R<sub>D</sub>, C<sub>3-7</sub>cycloalkyl substituted with 0-2 R<sub>D</sub>, (C<sub>3-7</sub>cycloalkyl)C<sub>1-4</sub>alkyl substituted with 0-2 R<sub>D</sub>, C<sub>1-6</sub>alkoxy substituted with 0-2 R<sub>D</sub>, -NH(C<sub>1-6</sub>alkyl) substituted with 0-2 R<sub>D</sub>, -N(C<sub>1-6</sub>alkyl)(C<sub>1-6</sub>alkyl) each C<sub>1-4</sub>alkyl independently substituted with 0-2 R<sub>D</sub>, -XR<sub>A</sub>, and Y, with the proviso that at least one of the positions ortho or para to the point of attachment of Ar to the pyrimidine ring shown in Formula A is substituted;

R<sub>D</sub> is independently selected at each occurrence the group consisting of halogen, hydroxy, cyano, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, CO(C<sub>1-4</sub>alkyl), CONH(C<sub>1-4</sub>alkyl), CON(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), -XR<sub>A</sub>, and Y;

X is independently selected at each occurrence from the group consisting of -CH<sub>2</sub>-, -CHR<sub>B</sub>-, -O-, -C(=O)-, -C(=O)O-, -NH-, -NR<sub>B</sub>-, -C(=O)NH-, -C(=O)NR<sub>B</sub>-, -NHC(=O)-, and -NR<sub>B</sub>C(=O)-;

B<sup>2</sup>  
C<sup>3</sup>  
cont

Y and Z are independently selected at each occurrence from the group consisting of: 3- to 7-membered carbocyclic and heterocyclic groups, which are saturated, unsaturated, or aromatic, which may be further substituted with one or more substituents independently selected from halogen, oxo, hydroxy, amino, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), and -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl); and  
n is 0, 1, or 2.

---

B<sup>3</sup>  
C<sup>4</sup>

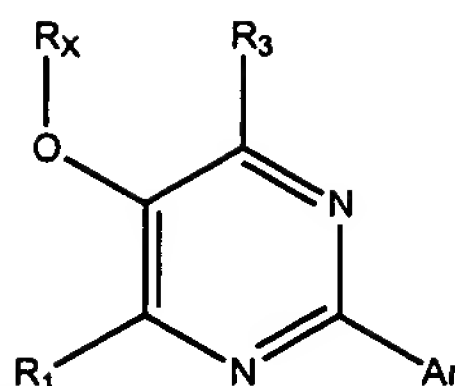
13. (amended) A compound or salt according to claim 9, wherein:  
Ar is phenyl mono-, di-, or tri-substituted with R<sub>C</sub>,  
R<sub>X</sub> and R<sub>Y</sub>, which may be the same or different, are independently selected at each occurrence from  
straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms; and  
R<sub>1</sub> and R<sub>3</sub> are independently selected from the group consisting of hydrogen, halogen, C<sub>1-4</sub>alkoxy, halo(C<sub>1-4</sub>)alkyl, (halo(C<sub>1-4</sub>)alkoxy, C<sub>1-6</sub>alkyl, which C<sub>1-6</sub>alkyl is unsubstituted or substituted by one to three substituents independently selected from hydroxy, oxo, cyano, C<sub>1-4</sub>alkoxy, amino, and mono- or di(C<sub>1-4</sub>)alkylamino, (C<sub>3-7</sub>cycloalkyl)C<sub>1-4</sub>alkyl, which (C<sub>3-7</sub>cycloalkyl)C<sub>1-4</sub>alkyl is unsubstituted or substituted by one to three substituents independently selected from hydroxy, oxo, cyano, C<sub>1-4</sub>alkoxy, amino, and mono- or di(C<sub>1-4</sub>)alkylamino.

---

B<sup>4</sup>  
C<sup>4</sup>  
cont

15. (amended) A compound or salt according to claim 3, of the formula

---



wherein:

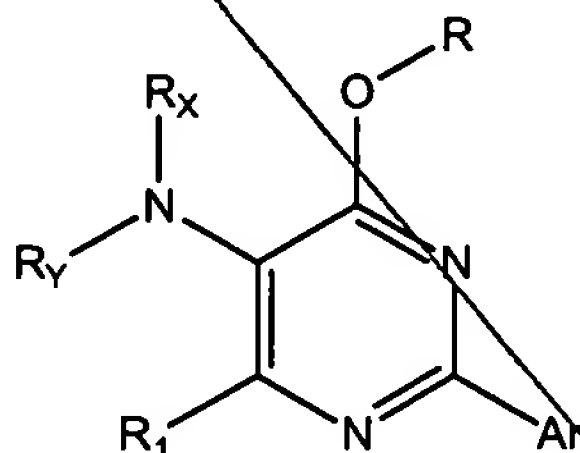
$R_x$  is chosen from

straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms, each of which may be further substituted with one or more substituent(s) independently selected from:

(a) hydroxy, halogen, amino, cyano,  $-O(C_{1-4}alkyl)$ ,  $-NH(C_{1-4}alkyl)$ , and  $-NH(C_{1-4}alkyl)(C_{1-4}alkyl)$ , and

(b) 3- to 7-membered carbocyclic and heterocyclic groups, which are saturated, unsaturated, or aromatic, which may be substituted with one or more substituents selected from halogen, halo( $C_{1-4}$ )alkyl, oxo, hydroxy, amino,  $C_{1-4}alkyl$ ,  $-O(C_{1-4}alkyl)$ ,  $-NH(C_{1-4}alkyl)$ ,  $-N(C_{1-4}alkyl)(C_{1-4}alkyl)$ , wherein said 3- to 7-membered heterocyclic groups contain one or more heteroatom(s) selected from N, O, and S, with the point of attachment being either carbon or nitrogen.

17. (amended) A compound or salt according to Claim 3 of Formula B:



FORMULA B

$Ar$  is phenyl mono-, di-, or tri-substituted with  $R_C$ ;

B5  
C5  
conf  
R is selected from straight, branched, or cyclic alkyl groups, (cycloalkyl)alkyl groups, straight, branched, or cyclic alkenyl groups, or straight or branched alkynyl groups, and which are optionally substituted by one or more substituents independently chosen from oxo, hydroxy, halogen, cyano, -O(C<sub>1-4</sub> alkyl), amino, -NH(C<sub>1-4</sub> alkyl), and -N(C<sub>1-4</sub> alkyl)(C<sub>1-4</sub> alkyl);

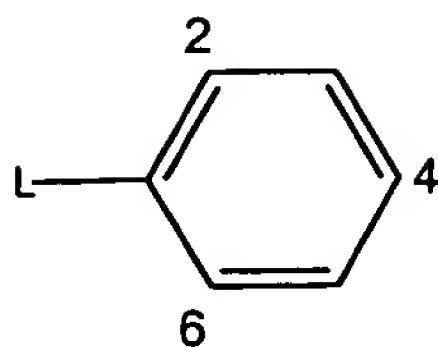
R<sub>1</sub> is selected from hydrogen, halogen, cyano, C<sub>1-4</sub> alkyl, (C<sub>3-7</sub>cycloalkyl)C<sub>1-4</sub>alkyl, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, and -O(C<sub>1-4</sub>alkyl); and

R<sub>X</sub> and R<sub>Y</sub> are the same or different and are independently selected from:

- hydrogen,
- (C=O)alkyl<sub>A</sub>, wherein alkyl<sub>A</sub> is a straight or branched alkyl group having from 1 to 8 carbon atoms;
- straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms, each of which may be further substituted with one or more substituent(s) independently selected from (i)hydroxy, halogen, amino, cyano, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), and -NH(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), and (ii)3- to 7-membered carbocyclic and heterocyclic groups, which are saturated, unsaturated, or aromatic, which may be substituted with one or more substituents selected from halogen, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, oxo, hydroxy, amino, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), and -S(O)<sub>n</sub>(alkyl), wherein said 3- to 7-membered heterocyclic groups contain one or more heteroatom(s) independently selected from N, O, and S, with the point of attachment being either carbon or nitrogen.

B6  
per C6  
19. (amended) A compound or salt according to Claim 17, wherein

Ar is a phenyl group of the formula:



wherein L indicates a bond to the pyrimidine ring in Formula B

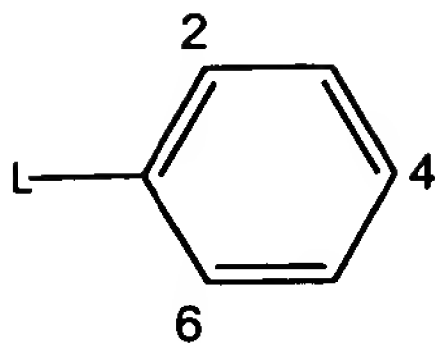
and the Ar phenyl group is substituted at one, two, or three of positions 2, 4, and 6 with substituents independently selected from:

- Handwritten notes: B6, Or 6, Cont
- i) halogen, cyano, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, hydroxy, amino, C<sub>1-6</sub> alkyl, C<sub>1-6</sub>alkoxy, (C<sub>1-4</sub>alkoxy)C<sub>1-4</sub>alkoxy, and mono- or di(C<sub>1-4</sub>alkyl)amino,
  - ii) C<sub>1-6</sub> alkyl and C<sub>1-6</sub>alkoxy which are further substituted with a 3- to 7-membered carbocyclic and heterocyclic group, which is saturated, unsaturated, or aromatic, which 3- to 7-membered carbocyclic and heterocyclic group may be further substituted with one or more substituents independently selected from halogen, oxo, hydroxy, amino, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), and -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl);

R<sub>X</sub> and R<sub>Y</sub> are the same or different and are independently selected from the group consisting of:

- a) hydrogen (with the proviso that R<sub>X</sub> and R<sub>Y</sub> are not both hydrogen),
- b) -(C=O)alkyl<sub>A</sub>, wherein alkyl<sub>A</sub> is a straight or branched alkyl group having from 1 to 8 carbon atoms;
- c) straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms, which may be further substituted with one or more substituent(s) independently selected from hydroxy, halogen, amino, cyano, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), and -NH(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl).

20. (amended) A compound or salt according to Claim 17, wherein Ar is a phenyl group of the formula:



wherein L indicates a bond to the pyrimidine ring in Formula B and the Ar phenyl group is substituted at one, two, or three of positions 2, 4, and 6 with substituents independently selected from:

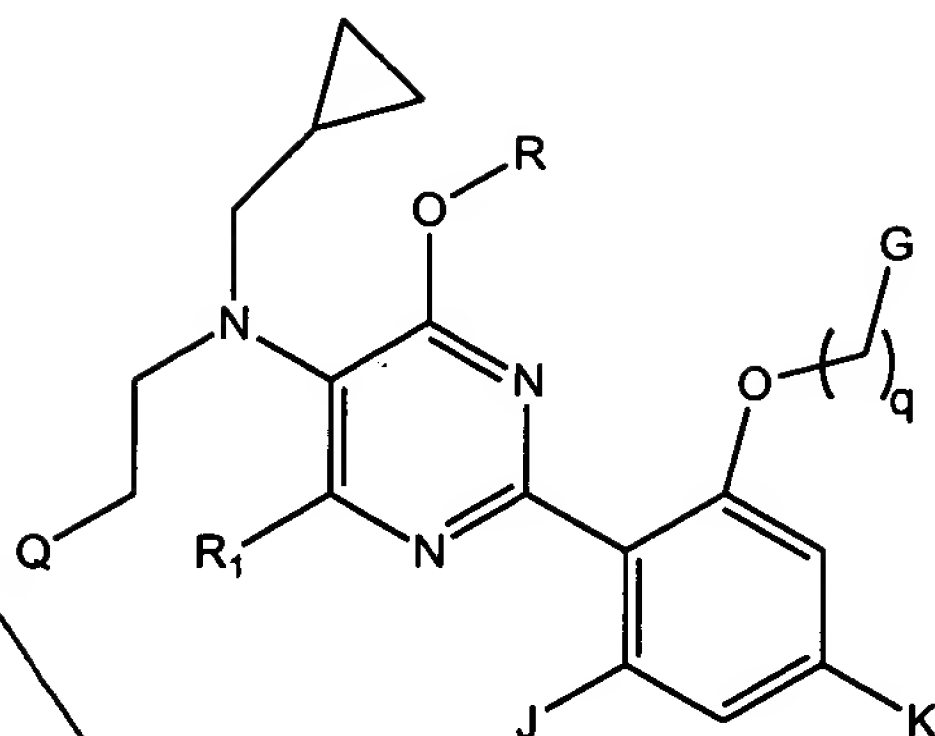
- i) halogen, cyano, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, hydroxy, amino, C<sub>1-6</sub> alkyl, C<sub>1-6</sub>alkoxy, (C<sub>1-4</sub>alkoxy)C<sub>1-4</sub>alkoxy, and mono- or di(C<sub>1-4</sub>alkyl)amino,
- ii) C<sub>1-6</sub> alkyl and C<sub>1-6</sub>alkoxy which are further substituted with a 3- to 7-membered carbocyclic and heterocyclic group, which is saturated, unsaturated, or aromatic, which 3- to 7-membered carbocyclic and heterocyclic group may be further substituted with one or more substituents independently selected from halogen, oxo, hydroxy, amino, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), and -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl);

R<sub>X</sub> and R<sub>Y</sub> are the same or different and are independently selected from the group consisting of:

- a) hydrogen (with the proviso that R<sub>X</sub> and R<sub>Y</sub> are not both hydrogen),
- b) -(C=O)alkyl<sub>A</sub>, wherein alkyl<sub>A</sub> is a straight or branched alkyl group having from 1 to 8 carbon atoms;
- c) straight, branched, or cyclic alkyl groups consisting of 1 to 8 carbon atoms, (cycloalkyl)alkyl groups consisting of 3 to 8 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 8 carbon atoms, or straight or branched alkynyl groups consisting of 2 to 8 carbon atoms.

22. (amended) A compound or salt according to Claim 17, of the formula:

Sub  
E1



wherein:

Q is hydrogen, C<sub>3-7</sub> cycloalkyl, pyrrolidinyl, piperidinyl, morpholino, or piperazinyl;

q is an integer from 1 to 4;

G is hydrogen, hydroxy, C<sub>1-6</sub>alkoxy, -NH(C<sub>1-6</sub>alkyl), -N(C<sub>1-6</sub>alkyl)(C<sub>1-6</sub>alkyl), or a 3- to 7-membered carbocyclic or heterocyclic group, which is saturated, unsaturated, or aromatic, which is unsubstituted or substituted with one or more substituents independently selected from halogen, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, oxo, hydroxy, amino, C<sub>1-4</sub>alkyl, -O(C<sub>1-4</sub>alkyl), -NH(C<sub>1-4</sub>alkyl), -N(C<sub>1-4</sub>alkyl)(C<sub>1-4</sub>alkyl), and -S(O)<sub>n</sub>(alkyl), wherein said 3- to 7-membered heterocyclic group contains one or more heteroatom(s) independently selected from N, O, and S, with the point of attachment being either carbon or nitrogen;

J and K are independently selected from halogen, cyano, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, hydroxy, amino, C<sub>1-6</sub> alkyl, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxy, (C<sub>1-4</sub>alkoxy) C<sub>1-4</sub>alkoxy, and mono- or di(C<sub>1-4</sub>alkyl)amino; and

R<sub>X</sub> and R<sub>Y</sub> are the same or different and are independently selected from hydrogen (with the proviso that R<sub>X</sub> and R<sub>Y</sub> are not both hydrogen), straight, branched, or cyclic alkyl groups having from 1 to 6 carbon atoms, straight, branched, or cyclic alkenyl groups consisting of 2 to 6 carbon atoms, and straight or branched alkynyl groups consisting of 2 to 6 carbon atoms.